

RECEIVED

DOCKET NO.: CACO-0051

JAN 10 2001

PATENT

Please cancel claims 19-35 without prejudice and without disclaimer as to the subject matter thereof.

TECH CENTER 1600/2900

Please add the following new claim:

- B4
36. The method of claim 1 wherein said cells producing said cellular component produce said RNase.
- C

REMARKS

We hereby confirm election of Group I, Claims 1-18. Applicant requests cancellation of claims 19-35, reserving the right to prosecute claims 19-35 in one or more divisional applications.

The claims currently pending are claims 1-18.

A marked-up version of the amended claims is attached as Appendix A.

The priority documents will be provided to the Examiner as soon as they are available.

Applicants have amended the claims to include the step of isolating the cellular component, as helpfully suggested by the Examiner.

Applicants have also amended claims 1 and 4 to provide antecedent basis for the term "RNase." As this amendment merely clarifies what was implicit in the claims as originally presented, no change in the scope of the claims is introduced.

Claim 3 has been amended to clarify that the cells producing the RNase and the cells producing the cellular components are different. The amendment merely clarifies what was implicit in the claims as originally presented. Therefore, no change in the scope of the claims is introduced.

Claim 4 has been amended to clarify the relationship between culturing and lysing the cells producing the RNase or cellular component. The amendment merely clarifies what was implicit in the claims as originally presented. Therefore, no change in the scope of the claims is introduced.

Claim 8 has been amended to provide antecedent basis for the term "gene" without affecting the scope of the claims.

Through amendment of Claims 1 and 4, sufficient antecedent basis is provided for "said RNase" without affecting the scope of the claims.

New claim 36 finds full support in the Specification, for example at page 3 lines 10-11 wherein it is stated that a preferred embodiment is one in which the cells that produce the cellular component also produce the RNase.

No new matter is introduced through any amendment herein.

Turning to the merits of the Application, the claims are patentable over Zhu *et al.* ("Zhu"). Zhu does not teach or suggest a method of preparing a substantially RNA-free cellular component. Specifically, Zhu never attempted to isolate a cellular component from a cell lysate wherein substantially all of the RNA present was degraded by RNase. Zhu merely identified the gene for RNase I by identifying cells with increased RNase activity. Zhu expressed RNase in RNase-deficient *E. coli* cells transfected with cosmids from a cosmid library. Zhu's goal was to identify RNase genes, not to isolate RNase-free cellular components. As such, Zhu was only reconstituting a defective *E. coli* strain back to essentially a wild-type.

Zhu also does not describe a method for degrading RNA. Zhu does not describe a "method" at all. Rather, Zhu describes the discovery of the gene encoding RNase I. Zhu postulates at the end of the paper that the most significant benefit to come from the work was the identification of the RNase-defective *E. coli* strain which can be used for "studies of RNA metabolism in *E. coli*" (see page 3150). Zhu does not teach that cells containing a cellular component and expressing RNase with sufficient activity to degrade substantially all of the RNA in a lysate can be used to prepare an isolated cellular component that is substantially RNA free.

Furthermore, the claims recite that the RNase activity is sufficient to degrade substantially all of the RNA in the lysate. Zhu measured the degradation of radiolabeled tRNA (an easy substrate for RNase)(see methods on page 3147). There is no evidence in Zhu that the RNase activity was sufficient to degrade substantially all of the RNA molecules in the lysate.

As the claims recite isolating the cellular component, Zhu does not anticipate the claims. We respectfully request withdrawal of the rejection under 35 U.S.C. § 102(b).

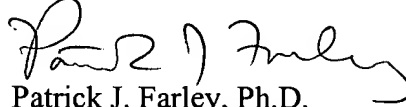
The claims are also patentable over Zhu in view of Clare. Clare does nothing to compensate for the fundamental deficiency of Zhu. The Examiner's hypothetical combination of Zhu and Clare does not teach or suggest the isolation of cellular components from cell lysates that are substantially free of RNA.

DOCKET NO.: CACO-0051

PATENT

We earnestly submit that the claims are allowable over the art of record, and we urge prompt allowance of the amended claims.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Patrick J. Farley".

Patrick J. Farley, Ph.D.

Registration No. 42,524

Date: January 03, 2001

WOODCOCK WASHBURN KURTZ
MACKIEWICZ & NORRIS LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103
(215) 568-3100

Appendix A

1. (Amended) A method of preparing a substantially RNA-free cellular component, comprising culturing cells producing the cellular component in a medium and lysing said cells to produce a cell lysate, wherein said cell lysate contains said cellular component and RNase with sufficient RNase activity to degrade substantially all of the RNA molecules present in said cell lysate, and isolating said cellular component.
3. (Amended) The method of claim 1, wherein said cells comprise RNase-producing cells and cells comprising said cellular component wherein the RNase is produced by said RNase-producing cells[in the medium other than said cells producing the cellular component].
4. (Amended) A method of preparing a substantially RNA-free cellular component, comprising culturing [and lysing] cells producing [the] a cellular component and cells producing an RNase, lysing said cells to produce a cell lysate, wherein said cells producing an RNase produce RNase in an amount sufficient to degrade substantially all of the RNA present in [the preparation] said cell lysate, and isolating said cellular component.
8. The method of claim 1 or 4, wherein [the gene encoding] said RNase is encoded by a gene that is integrated into the genome of the cell producing the RNase.